



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re:	Patent application of Volkhard Lindner	:	Group Art Unit: 1644
Serial No.:	10/634,108	:	Examiner: Maher Haddad
Filed:	August 4, 2003	:	Attorney Docket No.: 53689-5006-DI1
For:	COMPOSITIONS, METHODS AND KITS RELATING TO REMODEL	:	

SUPPLEMENTAL DECLARATION OF VOLKHARD LINDNER
UNDER 37 C.F.R. § 1.131

I, Volkhard Lindner, declare the following:

1. I have reviewed the office action mailed December 6, 2006, and the Examiner's rejection of claims 21, 37 and 43 as being anticipated by U.S. Pat. Publication 2004/0146862 of Mack et al. (hereinafter "Mack"), which has an earliest apparent priority date of March 15, 2000. This supplemental declaration is offered as further proof to establish that the subject matter of the instant invention was made in the United States prior to the earliest apparent priority date of Mack.

2. I am the sole inventor for the pending claims in the above-captioned application (hereinafter "Applicant"). As such, I have the personal knowledge to set forth the facts stated herein.

3. The instant patent application is a divisional application of U.S. Patent Application No. 09/692,081 filed on October 19, 2000, now issued as U.S. Patent No. 6,630,325 ("the '325 patent").

4. SEQ ID NO:4, set forth in the instant specification, was identically set forth as SEQ ID NO:4 in the parent application, now the '325 patent.

5. I identified and sequenced SEQ ID NO:4 prior to March 15, 2000.

6. Exhibit A, attached herewith, is a series of chromatograms representing the sequence identification of the oligonucleotide sequence of SEQ ID NO:4. Prior to my invention of SEQ ID NO:4, the "Expressed sequence tag" (EST) sequences resident in the publicly available databases included only 1) an incomplete oligonucleotide fragment representing the 3' end of REMODEL and 2) an incomplete oligonucleotide fragment representing a non-overlapping segment of the 5' end of REMODEL. The intervening sequence, between the two known sequences, was not known prior to my invention of SEQ ID NO:4. As part of the present invention, I cloned the missing intervening sequence by 5' RACE-PCR (rapid amplification of mRNA ends by polymerase chain reaction). Two clones (#3 and #4, as set forth in the chromatograms) were obtained and the oligonucleotide sequence was identified from both ends of the polynucleotide using Sp6 and T7 DNA primers. Sequencing using the Sp6 primer led me to identify SEQ ID NO:4 of the present invention.

7. Exhibit B, attached herewith, is the textual sequence data for the sequences as determined and described in paragraph 6 above.

8. The invention set forth in the presently-pending claims was made at Maine Medical Center Research Institute, 22 Bramhall St., Portland, Maine, 04103, United States of America, while I was a resident of the state of Maine.

I declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; that these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code; and that willful false statements may jeopardize the validity of the application or any patent issuing thereon.

April 4th, 2007

Date

B. Lindner

Volkhard Lindner, M.D., Ph.D.

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Exhibit A

**Supplemental Declaration of
Volkhard Lindner
Under 37 C.F.R. § 1.131**

Data Collection

File: h502 No3 Sp6.ab1
Sample: h502 5'race #3 SP6
Inj. Number: 1
Number of Points: 10240
Length: 816
Start Run 6:11 AM
Stop Run 9:07 AM
Start Collection 7:07 AM
Stop Collection 9:07 AM
Dyeset/Primer: DT POP6{dR Set-Any Primer}
Medium Lot #:
Medium Exp Date:
Instrument Name: ABI PRISM™ 310
Data Rate: 1
Collect Vers.: ABI PRISM 310 Collection 1.0.4

Data Analysis

Base Call Start: 1177
Base Call End: 10240
Peak 1 Location: 1177
Ave. Signal Intensity: G (110), A (141), C (133), T (117)
Matrix Name: d-Rhodamine filter E
Basecaller: ABI-CE2 3.0
Basecaller Version: Version 3.0b1
Base Spacing Used: 12.34
Base Spacing Calculated: 12.34
Length to Detector: 50
Tube Position: A1
Module File Name: Seq POP6 (1 mL) E

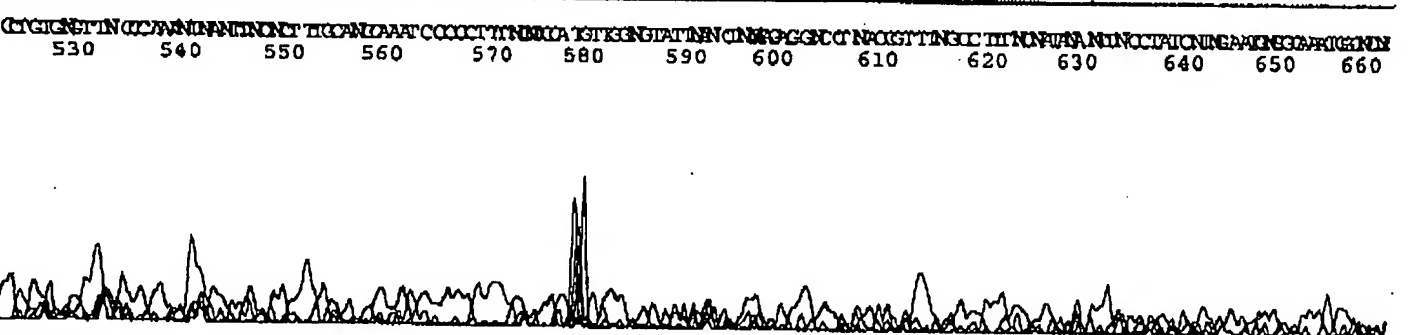
1	CNAATTCTAA	NAGNNTTNTT	CAANTCGNGN	ACCGNAGCTC	40
41	GNGATCCACT	NTANCNACGG	CCGCCCCGGTG	TGCTGGAATT	80
81	CGGCTTCTAT	TTGAACNAAT	CTTTGTAAAT	GTACACTCCG	120
121	CANTTTCCCA	AGATCTNATG	CCATAATTCA	ATGAACTCCA	160
161	TGAACACTGC	TTGTAGTTNG	GGTGTCCAGN	GCTCCTCAAA	200
201	GCTTTCCCTC	AGNNNNNNGN	GTTTTNCNT	TTGAATCCAT	240
241	CCCGACCTGG	GATCCCANGT	GTACCCGGAA	TGCCATTGGC	280
281	CCCAGGGCTC	CCGTCTCGAC	CAGGCACTCT	NGCTGGCCCT	320
321	TGTAAGCACA	TTCCATTATA	CAGGAAAAAA	AAAAAAAAAAG	360
361	TCGACATCGA	TACGCGTTGG	TCAAGCCGAA	TTCTGCANAT	400
401	AATCCATCAC	ATTGNGGGGC	CGCTCGANCA	TGCATCNANN	440
441	AGGGGGCCCAT	TTCNNCCCTA	TATTGAGTCG	TATTTACANT	480
481	TCACTGGGCC	GTCGTTTTAC	AANCCTCCNT	GACNGGGAAA	520
521	ACCCTGTGNG	TTNCCCAAAN	TNANTTNCNC	TTTGCANCCA	560
561	AATCCCCCTT	TNCNGCCATG	TTGGNGTATT	NANCTNNAAG	600
601	AGGNCCTNAC	CGTTTNGCCT	TTNCNATANA	NTTNCCTATC	640
641	NTNGAATGNG	GGAAATGGCN	TNNCTCCCTG	NTAATCNGGT	680

681 NCATTNAAGG CCGTNGGGN TTTTGGNGGT TAAAANTTTG 720
721 TGTTNANTNT ANNTTNNCN ACANANCCTA TNNTGCNGNT 760
761 NNTTTTNNAT TTNNTCCTTN TTTTTCACCN CANGTATCCC 800
801 NNTTTTCCNC CTTTGN 840

Feature key:

Range(s):

Description:





Model 013 h502 No3 Sp6.ab1
Version 3.7
ABI-CE2 3.0 h502 5'race #3 SP6
Version 3.0b1 Cap 1

Signal G:110 A:141 C:133 T:117
DT POP6(dR Set-Any Primer)
d-Rhodamine filter E
Points 1177 to 10240 Pk 1 Loc: 1177

Page 4 of 4
12:00 PM
6:11 AM
Spacing: 12.33(12.33)

670 680 690 700 710 720 730 740 750 760 770 780 790 800 810

EN

Data Collection

File: h502 No4 Sp6.ab1
 Sample: h502 5'race #4 SP6
 Inj. Number: 3
 Number of Points: 10240
 Length: 917
 Start Run 11:53 AM
 Stop Run 2:39 PM
 Start Collection 12:38 PM
 Stop Collection 2:39 PM
 Dyeset/Primer: DT POP6{dR Set-Any Primer}
 Medium Lot #:
 Medium Exp Date:
 Instrument Name: ABI PRISM™ 310
 Data Rate: 1
 Collect Vers.: ABI PRISM 310 Collection 1.0.4

Data Analysis

Base Call Start: 874
 Base Call End: 10240
 Peak 1 Location: 874
 Ave. Signal Intensity: G (120), A (162), C (147), T (129)
 Matrix Name: d-Rhodamine filter E
 Basecaller: ABI-CE2 3.0
 Basecaller Version: Version 3.0b1
 Base Spacing Used: 11.25
 Base Spacing Calculated: 11.25
 Length to Detector: 50
 Tube Position: A5
 Module File Name: Seq POP6 (1 mL) E

1	ANNATCTGAA	TATCGAANAC	NATCTTCCAC	NTCGGGGNAC	40
41	CGAAGCTCGN	GTTCCACAGA	CTAACGGCCG	CNCGTGTGCT	80
81	GGAATTCGGC	TTCTATTTGA	ANAATCTTTG	TAAATGTACA	120
121	TCCGCATTTT	CCCAAGATCT	ATGCCATAAT	TCAATGAACT	160
161	CCATGAACAC	TCGCTTGTAG	TTNGGGTGTC	CAGGACTCCT	200
201	CAAAGCTTTC	CCTCAGACAT	TCCCCCTTTT	CTCCTTTGAN	240
241	TCCATCCCCG	CCTGGGGATC	CCAGGTGTAC	CCGGANTGCC	280
281	ATTGNGCCCC	AGGGCTCCCG	TCTCGACCAG	GCACTCCTGC	320
321	TGGCCCTTGT	AAGCACATTC	CATTATACAG	GGAAAAAAAAA	360
361	AAAAANAGTC	CGACATCGAT	ACGCGTGGGT	CAANCCGANT	400
401	TCTGCACGAT	ATCNATCACA	CTGGCGGCCG	CTCGAGCATG	440
441	CATCTAGAGG	GCCCAATTCT	CCCTTATANT	GAGTCGTNTN	480
481	ACATTTCACT	GNGCCGTCNT	TTTACAACGT	CTGTGTCTGG	520
521	GGAAANTCCT	GNGCTTTACC	CAATTTTAAT	CGCCTTGCTA	560
561	NACATCCCNC	TTTCCCCNAG	TTGNCGTAAT	ANCCGAAANG	600
601	GTCCNGCATN	NATCGNCCTT	GCAATATTTN	NGCAGCCTGN	640
641	TNGNNANNTG	GCCGCCCTTG	TTATCGGCCC	TANGTCNCAI	680

681	GGGGGTGTTN	NTGGNTANCC	CNACCTGNCN	NTNANANTTT	720
721	CAGTNGCCCT	ATACCCCACT	CTTTTCGCTT	TTTNCANTCT	760
761	TTCCTNNNAN	ATNTAGNGGN	TTCCANTTNN	TNNANANTGT	800
801	GGGNGNNCNT	TNAGGTTCCN	TTTGTNTNT	NGNGNNCNCT	840
841	CCNNANTNAT	TTGTTAGGTT	CNNTCTGATC	TNNGNCNTNT	880
881	CTNCTCENNNG	NTNCTNCTTN	NNNTTGCTTC	CNTNNAN	920

Feature key:

Range(s):

Description:

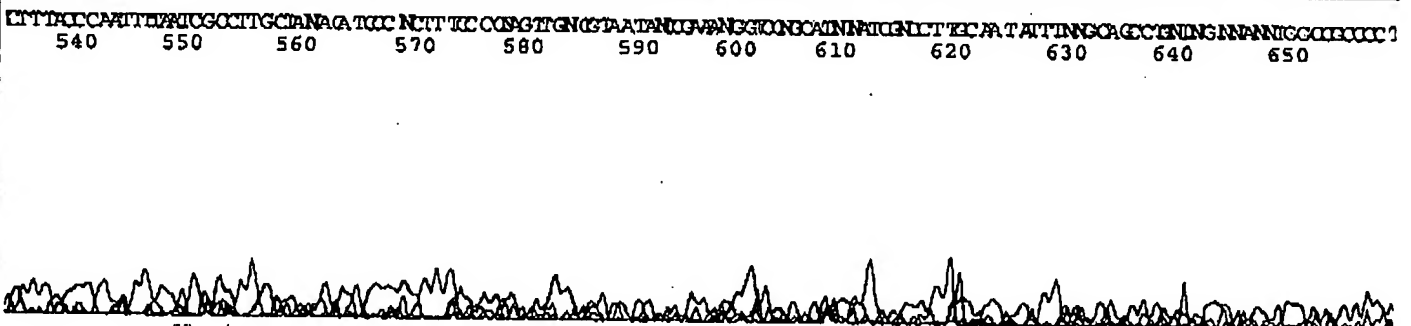
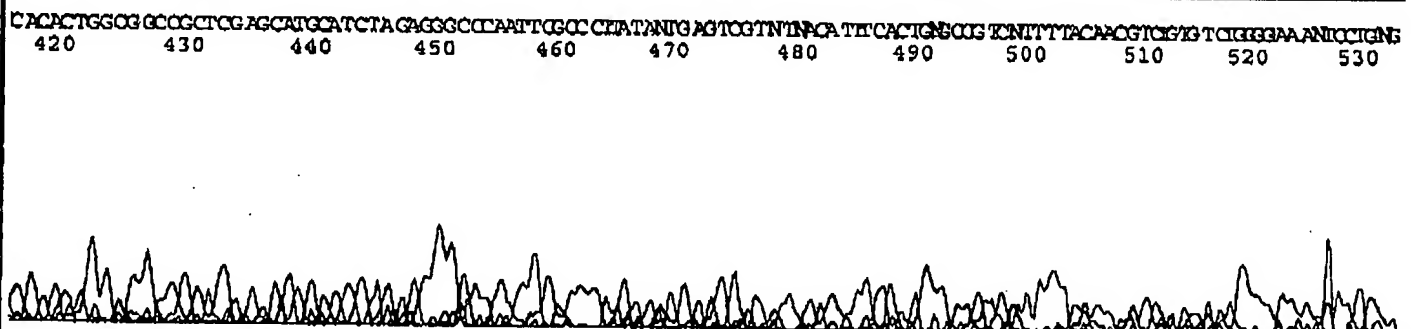
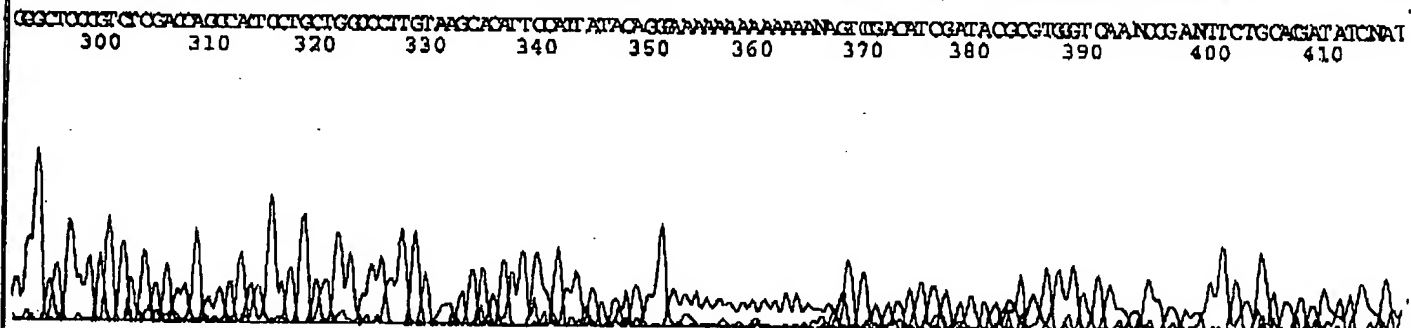
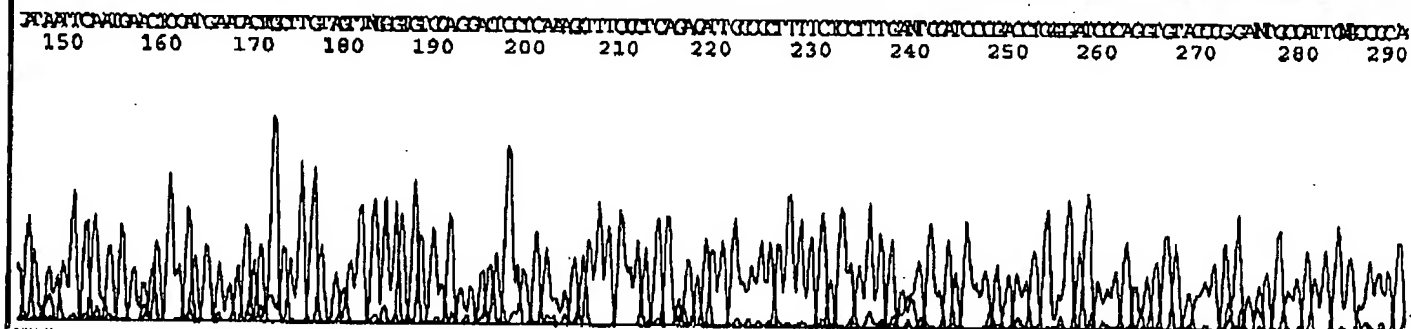
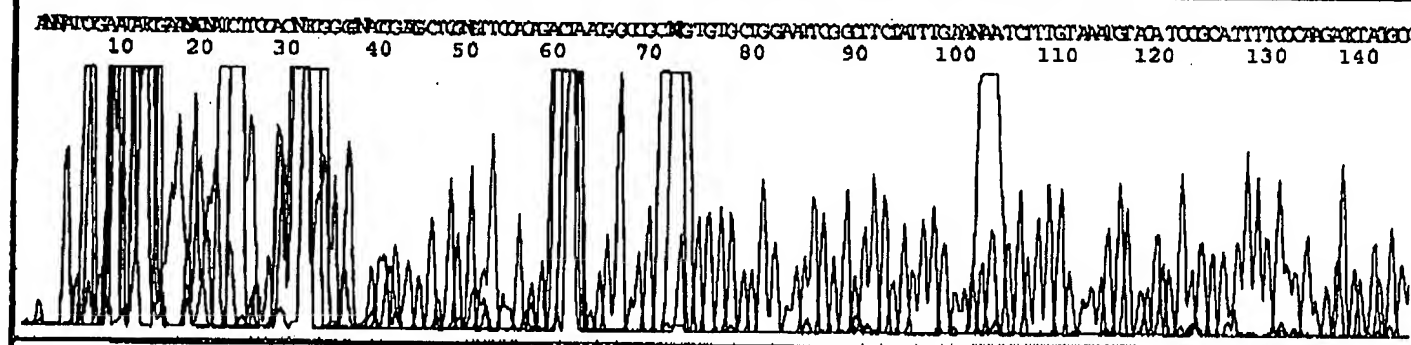


Model 013
Version 3.7
ABI-CE2 3.0
Version 3.0b1

h502 No4 Sp6.ab1
h502 5' race #4 SP6
Cap 3

Signal G:120 A:162 C:147 T:129
DT POP6(dR Set-Any Primer)
d-Rhodamine filter E
Points 874 to 10240 Pk 1 Loc: 874

Page 3 of 4
Mon. 12:00 PM
Fri 11:53 AM
Spacing: 11.25(11.25)





Model 013 h502 No4 Sp6.ab1
Version 3.7
ABI-CE2 3.0 h502 5'race #4 SP6
Version 3.0b1 Cap 3

Signal G:120 A:162 C:147 T:129
DT POP6(dR Set-Any Primer)
d-Rhodamine filter E
Points 874 to 10240 Pk 1 Loc: 874

Mc

Page 4 of 4

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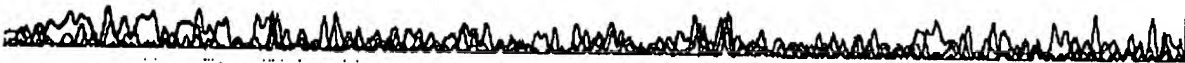
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Spacing: 11.25(11.25)

60 670 680 690 700 710 720 730 740 750 760 770 780 790



800 810 820 830 840 850 860 870 880 890 900 910



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Filed:	August 4, 2003	:	
		:	Attorney Docket No.:
For:	COMPOSITIONS, METHODS AND KITS RELATING TO REMODEL	:	53689-5006-DI1 (206295)
		:	

Exhibit B

**Supplemental Declaration of
Volkhard Lindner
Under 37 C.F.R. § 1.131**

CNAATTCTAANAGNNTTNTTCAANTCGNGNACCGNAGCTCGNGATCGAOTNTANCNACGGCCGCC
GGTGTGCTGGAATTCGGCTTCTATTTGAACgcATCTTTGTAAATGTACACTCCGCAatTTTCCCAA
GATCTATGCCATAATTCAATGAACCTCCATGAACACTGCTTGTAGTGGGTGTCCAGNGCTCCTCA
AAGCTTTCCCTCAGNNNNNNNGNGTFTTNCNTTTGAATCCATCCCGAGCTGGGATCCCANGTGTAC
CCGGAATGCCATTGGGCCCCAGGGCTCCCCGTCTCGACGAGGCACTCTNGCTGGCCCTTGTAAGCACA
TTCCATTATACAGGAAAAAAGTTCGACATCGATACGCGTTGGTCAAGCCGAATTCT
GCANATAATCCATCACATTGNGGGGGCGCTCGANCATGCATCNANNAGGGGGCCATTTCNNCCCT
ATATTGAGTCGTATTTACANTTCACTGGGGCGCTCGTTTACAANCGTCCNTGACNGGGGAAAACCC
TGTGNGTTNCCCAAANTNANTTNCNTTTCCANCCAAATCCGCCCTTNCNGCCATGTTGGNGTATT
NANCTNNAAGAGGNGCTNAGGCTTNGGCTTNCNATANANDINGCTATONTGAATGNGGGAAA
TGGCNTNNTCCCTGNTAATGNGGCTNATNAGGCCCCGTTGGGTTTTCGNGGGTTAAANTTTGT
GTTNANTNTANNTTTNNCNACANANCCATNTTGCNGNTNTTTTNTATTNTTNTCTTNTTTTCA
CCNCANGTATCCCNNTTTTCNCCTTTGN

h 50251 rec #3 Sp 6 24/4

CNAATTCTAANAGNNTTNTTCAANTCGNGNACGCGNAGCTGGNGATCCAGTNTANCNACGGCCGCCCC
GGTGTGCTGGAATTCGGGCTTCTATTTGAACNAATCTTTGTAAATGTACACTCCGCANTTTCCCAA
GATCTNATGCCATAATTCAATGAACTCCATGAACACTGCTTGTAGTTNGGGTGTCCAGNGCTCCT
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ACCCGGAATGGCATTGGGCCCCAGGGCTCCCGTCTCGACCGAGGCACTCTNGCTGGCCCTTGTAAGCA
CATTCCATTATAGAGGAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA
CTGCANATAATCCATCAGATTGNGGG
TATATTGAGTCGTATTACANTTCACTGG
CTGTGNGTTCNCCCAAANTNANTTNCNCTTTGCCANCCAAATGCCCCCTTTCNNGCCCATGTTGGNGTAT
TNANCTNNAAGAGGNCCTNACCGTTTNGCCCTTNCNATANANTTNCCTATCNTNGAATGNGGGGAA
ATGGCNTNNCTCCCTGNTAATGNGGTNCATTAAGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
TGTTNANTNTANNTTTNNCNACANANCCTATNNTGCGNGTNNNTTTTINATTNNNTCCTTNTTTTTTC
ACCNCANGTATCCCNNTTTCCNCCCTTGN

4502 5' rec #3 Sp6

ANNATCTGAATATCGAANACNATCTTCCACNTCGGGGNACCGAAGCTCGNGTTCCACAGACTAAC
GGCCGCNCGTGTGCTGGAAATGGGCTTCTATTGAANAATCTTGTAAATGTACATCCGCATTTTC
CCAAGATCTATGCGATAATTCATGCACTGATGACAGCTGGGCTGCTAGTTTGGGTGTCCAGGAC
TCCTCAAAGCTTTCCTCAGACATTCCTCCCTTCTCTCTTGTGANTCCATCCCGACCTGGGGATCCC
AGGTGTACCCGGANTGCCATTGNGCCCCAGGGGTCCCGTCTCGACCCAGGCACTCCTGCTGGCCCTT
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ANCCGANTTCTGCAGGATATCNATCACACTGGGGGGGGCTCGAGCATGCATCTAGAGGGGCCCAAT
TCGCCCTTATANTGAGTGGTNNAGATTCAGTNGGGCTONTTTCAGAACGTCTGTGTCTGGGGA
AANTCCTGNGCTTACCGAATTTAAATCGCTTTTANATCCGCTTTGGCCNAGTTGNCGTAA
TANCCGAAANGGTCCNGCATNNATCGNCCCTCTAAATTTNGCAGCCTGNTNGNNANNTGGCCGC
CCCTGTTATCGGCCCTANGTCNCATGGGGGTGTNNNTGGNTANCCCNACCTGNCNNTNANANTTTC
AGTNGCCCTATACCCCANCTCTTTTCGCTTTTNCANTCTTCTCTNNNANATNTAGNGGNTTCCANT
TNNTNNANANTGTGGGNGNNCNTTNAGGTTCONTTGTNTNTNGNGNNCCTCCNNANTNATTTGT
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h5025

h5p6